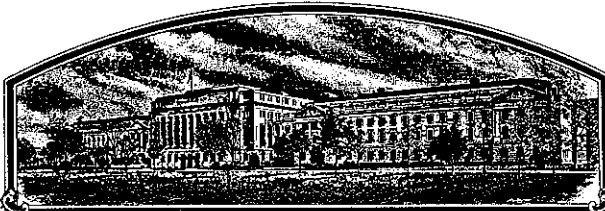


No.

8200044



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Northrup King Co.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 1942, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)



Attest:

Kenneth A. Egan
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Perennial Ryegrass 'Ggalie'
In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 31st day of January in
the year of our Lord one thousand nine
hundred and eighty-six

[Signature]
Acting Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY K5-92		1b. VARIETY NAME Goalie		FOR OFFICIAL USE ONLY PV NUMBER 8200044	
2. KIND NAME Perennial Ryegrass		3. GENUS AND SPECIES NAME Lolium perenne L.		FILING DATE 12/18/81	TIME 12:00 A.M. P.M.
4. FAMILY NAME (BOTANICAL) Gramineae		5. DATE OF DETERMINATION 1978		FEE RECEIVED \$ 500.00 \$	DATE 12/18/81
6. NAME OF APPLICANT(S) Northrup King Co.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P. O. Box 959 Minneapolis, MN 55440		8. TELEPHONE AREA CODE AND NUMBER (612)781-5305	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Delaware		11. DATE OF INCORPORATION 1896
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Dr. Robert W. Romig Northrup King Co. P. O. Box 959/Minneapolis, MN 55440					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☒ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☒ YES ☒ NO (If "Yes," give name of countries and dates.)

ENGLAND 11/29/80
EST 11/19/82

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

DECEMBER 15, 1981
(DATE)

Robert W. Romig
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



**ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES
AS COLLATERAL SECURITY**

THIS ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES AS COLLATERAL SECURITY ("Assignment") 1995, by and between NK LAWN & GARDEN CO., a Delaware corporation ("BORROWER"), with its mailing address at 7500 Olson Memorial Valley, Minnesota 55427, and CONGRESS FINANCIAL CORPORATION, a Wisconsin corporation ("Lender"), with its mailing address at 100 South Wacker Drive, Suite 1900, Chicago, Illinois 60606.

DO NOT
COPY

RECITALS

The BORROWER has applied to the Lender for certain credit accommodations. The Lender has agreed to extend the credit accommodations to the Borrower, under the terms and conditions set forth in a Loan and Security Agreement of even date herewith, ("Agreement") by and between the Borrower and the Lender, and various other documents, instruments and agreements executed by or on behalf of the Borrower in connection with the above-described credit accommodations (together with the Agreement, collectively, "Loan Documents"). Capitalized terms used herein without definition shall have the meanings ascribed to such terms in the Agreement.

In order to induce the Lender to enter into the above-described credit accommodations, the Borrower, pursuant to the terms and conditions of the Agreement, has agreed to assign to the Lender certain Plant Variety Protection Certificates, and has granted to the Lender a lien on and security interest in all of the Borrower's assets, including but not limited to, those assets relating to products manufactured pursuant to the Plant Variety Protection Certificates, whereby the Lender, upon the occurrence of an Event Of Default (as such term is defined in the Agreement), shall have the right to foreclose on the Plant Variety Protection Certificates and other assets of the Borrower, in order that the owner of the Plant Variety Protection Certificates may continue the manufacturing of products manufactured under the Plant Variety Protection Certificates.

NOW, THEREFORE, FOR GOOD AND VALUABLE CONSIDERATION, the receipt and adequacy of which are hereby acknowledged, the Borrower agrees with the Lender as follows:

Section 1. Assignment. The Borrower, as additional security for the complete and timely payment, performance and satisfaction of all of the Obligations (as defined in the Agreement), hereby assigns, transfers, sets over and conveys unto the Lender, its successors and assigns, upon the following terms and conditions, all of its right, title and interest existing in, under or by virtue of those certain Plant Variety Protection Certificates registered with the Department of Agriculture, Plant Variety Protection Office and described on Exhibit A attached hereto and made a part hereof and all claims for damages by reason of past infringement of the assigned Plant Variety Protection Certificates with the right to sue for and collect the same (collectively, "Certificates") and all license rights in the Certificates.

FULL DOCUMENTATION IN ASSIGNMENTS
DRAWER

RELEASE OF ASSIGNMENT OF
PLANT VARIETY PROTECTION CERTIFICATES
AS COLLATERAL SECURITY

WHEREAS, pursuant to that certain Assignment of Plant Variety Protection Certificates as Collateral Security dated as of March 1, 1993 and filed with the United States Department of Agriculture Plant Variety Protection office in the records listed on Schedule A attached hereto (the "Security Document"), NK Lawn & Garden Co., a Delaware corporation ("Debtor"), granted to StanChart Business Credit, Inc. (now known as Lasalle Business Credit, Inc.), a Delaware corporation (the "Secured Party"), a security interest in and to all of the right, title and interest in, under and by virtue of certain plant variety protection certificates owned by the Debtor, as set forth in Schedule B hereto (the "Collateral").

WHEREAS, the Secured Party no longer claims a security or any other interest under the Security Document.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Secured Party hereby terminates the Security Document and reassigns, releases and discharges to Debtor, without representation, warranty or recourse (express or implied), all of Secured Party's right, title and interest (including, without limitation, its security interest) in and to the Collateral.

ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES
AS COLLATERAL SECURITY

THIS ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES AS COLLATERAL SECURITY ("ASSIGNMENT") is dated as of March 1, 1993, by and between NK LAWN & GARDEN CO., a Delaware corporation ("BORROWER"), with its mailing address at 7500 Olson Memorial Highway, Golden Valley, Minnesota 55427, and STANCHART BUSINESS CREDIT, INC., a Delaware corporation ("LENDER"), with its mailing address at 120 East Baltimore Street, Suite 1802, Baltimore, Maryland 21202.

RECITALS

The BORROWER has applied to the LENDER for certain credit accommodations. The LENDER has agreed to extend the credit accommodations to the BORROWER, under the terms and conditions set forth in a Loan And Security Agreement executed on March 1, 1993, ("AGREEMENT") by and between the BORROWER and the LENDER, and various other documents, instruments and agreements executed by or on behalf of the BORROWER in connection with the above-described credit accommodations (together with the AGREEMENT, collectively, "LOAN DOCUMENTS").

In order to induce the LENDER to enter into the above-described credit accommodations, the BORROWER, pursuant to the terms and conditions of the AGREEMENT, has agreed to assign to the LENDER certain Plant Variety Protection Certificates, and has granted to the LENDER a lien on and security interest in all of the BORROWER'S assets, including but not limited to those assets

EXHIBIT A

<u>NAME OF VARIETY</u>	<u>PLANT VARIETY PROTECTION CERTIFICATE/ APPLICATION NUMBER</u>	<u>APPLICATION/ ISSUE DATE</u>	<u>NAME OF OWNER</u>
Kentucky Bluegrass Aspen	8600151	04-30-87	*
Kentucky Bluegrass Trenton	8600156	04-30-87	*
Puccinellia Distans Weeping Alkaligrass Fults	8300071	12-30-83	*
Perennial Ryegrass Delray	8200043	04-26-85	*
Perennial Ryegrass Goalie	8200044	01-31-86	*
Chewings Fescue Dover	9100133	03-11-91	*
Fine Fescue Dover	9100133	03-11-91	*

* NK Lawn & Garden Co.

GOALIE PERENNIAL RYEGRASS

EXHIBIT AORIGIN AND BREEDING OF GOALIE PERENNIAL RYEGRASS

1. The development of Goalie perennial ryegrass began in 1965 using mass selection procedures. Plants were selected out of three populations identified as Syn O, RG103, and RG104. The former was obtained from Rutgers University, and the latter two populations from Pennsylvania State University. Selected plants were crossed to pollen source plants originating from Syn 01-56, a population from the Plant Breeding Station at Ottawa, Ontario, Canada; various European sources including the varieties Pelo and Herof; from U.S.D.A. Plant Introduction Station sources; and other germ plasm.
2. Between 1965 and 1968, the progeny were screened using several test procedures, after which the germ plasm was again consolidated as Project PR 6801. Following field selection at Northrup King's Research Station, Eden Prairie, Minnesota, polycross seed was produced.
3. The next generation was field screened at the Northrup King research Station, Atmore, Alabama, in Project PR 7154. Seed was harvested from selected plants the following season.
4. The Atmore seed was returned to the Northrup King Research Station in Eden Prairie, Minnesota, where the resultant seedlings were greenhouse screened against Helminthosporium spp., crown rust (Puccinia coronata), and for heat tolerance. Surviving plants were established under field conditions as Project PR 7302. Selection continued against Helminthosporium spp., leaf diseases, crown rust, and unidentified diseases, as well as for winter hardiness and plant type.

Three plants were selected for uniform flowering to form the base population which resulted in the development of Goalie.

5. The three parent plants were crossed in Project PR 7465 and were identified as:

X 7465	8-35
X 7465	41-6
X 7465	60-12
6. The Syn 2 and advanced generations were tested as experimental variety K5-92.
7. By 1978, it had been ascertained that K5-92 was a distinct and reproducible variety. The name Goalie was assigned.



NORTHROP KING CO.
P.O. BOX 959, MINNEAPOLIS, MN 55440

Ryegrass Application No. 8200044. Goalie

Addendum To Exhibit A. Uniform and Stable Statement.

Goealie perennial ryegrass meets certification standards for uniformity and stability. One percent to three percent of the plants can be expected to produce branched type heads, with the remaining plants producing normal spike-type heads.

EXHIBIT B

The following were licensed to Jacklin Seed Company by agreement of March 9, 1992:

<u>NAME OF VARIETY</u>	<u>PLANT VARIETY PROTECTION CERTIFICATE/ APPLICATION NUMBER</u>
Kentucky Bluegrass Aspen	8600151
Kentucky Bluegrass Trenton	8600156
Puccinellia Distans Weeping Alkaligrass Fults	8300071
Perennial Ryegrass Delray	8200043
Perennial Ryegrass Goalie	8200044
Fine Fescue Dover	9100133

Ryegrass Application No. 8200044, 'Goalie'

Exhibit B. Novelty Statement, Amended.

Goalie Perennial Ryegrass is most similar to Pennfine but differs from Pennfine in that it flowers from 6 to 13 days later and is from 4 to 9 cm shorter, as shown below.

Comparison of Flowering Dates ^{1/} of Goalie and Pennfine

Location and Year	Date for Variety -		Difference in Days
	Goalie	Pennfine	
Eden Prairie, MN - 1979	June 14	June 8	6
North Willamette Valley, OR - 1977	June 19	June 11	8
South Willamette Valley, OR - 1977	June 19	June 10	9
South Willamette Valley, OR - 1980	June 23	June 10	13
Average	June 19	June 10	9 ^{2/}

^{1/} 50% pollen shed

^{2/} $s_{\bar{d}} = 2.17$, $t = 4.15^*$ for 3 d.f.

Comparison of Culm Lengths of Goalie and Pennfine

Location and Year	Variety		Difference
	Goalie	Pennfine	
	cm	cm	cm
Eden Prairie, MN - 1979	43	47	-4
North Willamette Valley, OR - 1977	61	69	-8
South Willamette Valley, OR - 1977	61	68	-7
South Willamette Valley, OR - 1980	59	68	-9
Average	56	63	-7 ^{2/}

^{1/} $s_{\bar{d}} = 1.17$, $t = 4.2^*$ for 3 d.f.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782
OBJECTIVE DESCRIPTION OF CULTIVARS
RYEGRASS
(*Lolium spp.*)

FORM APPROVED: OMB NO. 40-R3712

NAME OF APPLICANT(S)

Northrup King Co.

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)

P.O. Box 959
Minneapolis, MN 55440VARIETY NAME OR TEMPORARY DESIGNATION
GoalieFOR OFFICIAL USE ONLY
PVPO NUMBER

8200044

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in first box (e.g. 089 or 09) when number is either 99 or less or 9 or less. Descriptions of characters should represent those that are typical for the variety. Ranges may be given also. Measured data should be for SPACED PLANTS. Give additional description for all characteristics that cannot be adequately described in the form below. Append all pertinent comparative trial and evaluation data.

1. SPECIES:

2 1 = L. MULTIFLORUM (annual or Italian: includes Westerwoldicum) 2 = L. PERENNE (perennial) 3 = L. RIGIDUM (includes Wimmera)
4 = HYBRID (of species) 5 = OTHER (Specify) _____

2. PLOIDY:

1 1 = DIPLOID 2 = TETRAPLOID 3 = OTHER (Specify) _____

3. DURATION:

3 1 = ANNUAL OR BIENNIAL 2 = SHORT LIVED PERENNIAL (3-4 years) 3 = PERENNIAL (more than 4 years)

1 = GULF
5 = NORLEA

2 = WIMMERA 62

6 = ABERYSTWYTH S-23

STANDARD CULTIVARS

3 = LINN

7 = MANHATTAN

4 = PELO

8 = PENNFINE

9 = Yorktown
10 = Citation
11 = Derby

4. MATURITY (50% HEADED)

Use standards from above for comparison:

5 1 = VERY EARLY 3 = EARLY
5 = MEDIUM 7 = LATE
9 = VERY LATE

09 DAYS EARLIER THAN
06 DAYS LATER THAN 7 STANDARD CULTIVAR
8 STANDARD CULTIVAR

5. MATURE PLANT HEIGHT (Use standard cultivars from above):

051 CM. HIGH
005 CM. TALLER THAN 010 CM. SHORTER THAN 7 STANDARD CULTIVAR
9 STANDARD CULTIVAR

6. PERCENT WINTER DAMAGE (estimated as percent of the area appearing dead).

Use standard cultivars from above for comparison:

022 PERCENT DAMAGE OF APPLICATION CULTIVAR
025 PERCENT DAMAGE OF 11 STANDARD CULTIVAR

7. TURF DENSITY

Use standard cultivars from above:

505 TILLERS PER 100 SQ. CM.
070 LESS TILLERS PER 100 SQ. CM. THAN 7 STANDARD CULTIVAR
001 MORE TILLERS PER 100 SQ. CM. THAN ... 8 STANDARD CULTIVAR

8. FLAG LEAF (at full growth)

Use standard cultivars from above:

094 CM. LENGTH (from ligule to tip) 029 MM. WIDTH (at widest point)
020 CM. SHORTER THAN 7 STANDARD CULTIVAR
007 CM. LONGER THAN 8 STANDARD CULTIVAR
004 MM. NARROWER THAN 8 STANDARD CULTIVAR
002 MM. WIDER THAN 11 STANDARD CULTIVAR

FLAG LEAF AT
BOOT STAGE: 1 = DEFLEXED
3 = RECURVED
5 = HORIZONTAL
7 = SEMI-ERECT
9 = ERECT

1 = GULF
5 = NORLEA2 = WIMMERA 62
6 = ABERYSTWYTH S-23

STANDARD CULTIVARS

3 = LINN
7 = MANHATTAN

4 = PELO

8 = PENNFINE

9 = YORKTOWN
10 = Citation
11 = Derby

9. LEAVES:

1

1 = LEAVES ROLLED IN YOUNG SHOOTS
VERNATION: 2 = LEAVES SEMI-ROLLED (folded with rolled edges)
3 = LEAVES FOLDED IN YOUNG SHOOTS

0 3 3

% PLANTS WITH ANTHOCYANIN IN LOWER LEAF SHEATH

3

FOLIAGE COLOR:

1 = YELLOW GREEN
2 = MEDIUM GREEN
3 = BLUE GREEN

10. SPIKE:

1 2 5

MM. SPIKE LENGTH (tip to internode below lowest floret)

5 4

MM. SHORTER THAN

7

1 1

MM. LONGER THAN

11

USE STANDARD CULTIVARS FROM ABOVE

MG. PER TEN SPIKES (trimmed to internode below lowest floret)

MG. LIGHTER PER TEN SPIKES THAN

USE STANDARD CULTIVARS FROM ABOVE

MG. HEAVIER PER TEN SPIKES THAN

0 8

FLORETS PER SPIKELET

PERCENTAGE OF PLANTS WITH:

RACHIS:

% SMOOTH

% ROUGH

SPIKE COLOR:

0 6 8

% GREEN

0 3 2

% PURPLE

LEMMA:

0 0 0

% AWNED

MM. AWN LENGTH

0 9

MM. GLUME LENGTH

1

1 = SPIKELET LENGTH NEARLY EQUAL TO OUTER GLUMES
2 = SPIKELET LENGTH MUCH LONGER THAN OUTER GLUMES

11. COLEOPTILE:

% PLANTS WITH ANTHOCYANIN IN COLEOPTILE

12. ANTHOR COLOR:

0 0 2

% PLANTS WITH WHITE ANTHERS

0 8 5

% PLANTS WITH YELLOW ANTHERS

0 1 3

% PLANTS WITH PURPLE ANTHERS

13. ROOT AND PLANT CHARACTERS:

% PLANTS WITH PROSTRATE GROWTH HABIT

0 0 0

% PLANTS WITH FLUORESCENT ROOTS

% PLANTS WITH UPRIGHT GROWTH HABIT

14. SEED:

1 1 9 0

MG. PER 1,000 SEED

0 5 5

MM. TOTAL LENGTH OF 10 SEEDS

0 1 2

MM. TOTAL WIDTH OF TEN SEEDS

7

JGH 1/15/85

6

15. DISEASE (0 = NOT TESTED, 2 = HIGHLY SUSCEPTIBLE, 4 = MODERATELY SUSCEPTIBLE, 6 = MODERATELY RESISTANT, 8 = HIGHLY RESISTANT):

4	<input checked="" type="checkbox"/>	CROWN RUST (<i>Puccinia coronata</i>)	4	<input checked="" type="checkbox"/>	DOLLAR SPOT (<i>Sclerotinia</i>)	6	<input checked="" type="checkbox"/>	BROWN PATCH (<i>Rhizoctonia</i>)
4	<input checked="" type="checkbox"/>	LEAF SPOT (<i>Helminthosporium</i>)	8	<input checked="" type="checkbox"/>	MILDEW	0	<input type="checkbox"/>	OTHER (Specify)
6	<input checked="" type="checkbox"/>	SNOW MOLD (<i>Typhula</i>)	4	<input checked="" type="checkbox"/>	RED THREAD (<i>Corticium</i>)			

8871 6
11/1/85

16. INSECT (0 = NOT TESTED, 2 = HIGHLY SUSCEPTIBLE, 4 = MODERATELY SUSCEPTIBLE, 6 = MODERATELY RESISTANT, 8 = HIGHLY RESISTANT):

☐ 0 (Specify) _____

17. GIVE RESEMBLANCE VALUE IN LEFT COLUMN AND VARIETY CODE NUMBER IN RIGHT COLUMN FOR VARIETY WITH WHICH COMPARISON IS MADE (1 = LESS THAN, 2 = SAME AS, 3 = MORE ERECT, MORE RESISTANT, DENSER, MORE PERSISTENT, DARKER OR GREATER HEIGHT.):

RESEMBLANCE	CHARACTER	SIMILAR VARIETY
<input type="checkbox"/> 2	PLANT HABIT (erectness)	<input type="checkbox"/> 9 1 = GULF
<input type="checkbox"/> 2	TILLERING	<input type="checkbox"/> 8 2 = WIMMERA 62
<input type="checkbox"/> 3	WINTER HARDINESS	<input type="checkbox"/> 7 3 = LINN
<input type="checkbox"/> 2	HIGH TEMP. STRESS RESISTANCE	<input type="checkbox"/> 8 4 = PELO
<input type="checkbox"/> 2	TURF PERSISTENCE	<input type="checkbox"/> 8 5 = NORLEA
<input type="checkbox"/> 2	PLANT COLOR	<input type="checkbox"/> 11 6 = ABERYSTWYTH S-23
<input type="checkbox"/> 2	VERTICAL SEEDLING GROWTH RATE	<input type="checkbox"/> 8 7 = MANHATTAN
<input type="checkbox"/> 2	CROWN DENSITY	<input type="checkbox"/> 8 8 = PENNFINE
<input type="checkbox"/> 2	MOWER SHREDDING RESISTANCE	<input type="checkbox"/> 7 9 = Yorktown

10 = Citation
11 = Derby

18. GIVE AREA OF ADAPTATION AND INTENDED USE: Wherever turf type perennial ryegrasses are currently used.

19. GIVE AREA TEST RESULTS PRESENTED FROM: _____

COMMENTS:

EXHIBIT D (CORRECTED)

Additional Description of the Variety

The following data gives comparisons of Goalie with other varieties as well as values of statistical significance:

CHARACTERISTIC	VARIETY				F-VALUE/LSD .05	
	GOALIE	PENNFINE	MANHATTAN	YORKTOWN		
Culm Length (cm)	51.3	52.2	61.9	46.7	4.59*	3.17
Flag Leaf Width (mm)	2.9	3.3	3.3	3.0	1.14	N.S.
Flag Leaf Length (cm)	9.4	8.7	11.4	8.0	6.40**	0.99
Spike Length (cm)	12.48	13.01	17.86	12.42	13.70**	1.12
Florets/Spike (No.)	7.7	7.6	8.9	8.0	6.58**	0.7
Glume Length (mm)	8.67	9.27	11.10	9.13	8.17**	0.91
Thousand Seed Weight (gm)	1.79	1.70	1.19	1.62	78.78**	0.07
Seed Length (mm)	5.51	5.44	5.32	5.24	1.38	N.S.
Seed Width (mm)	1.16	1.20	1.11	1.09	2.85*	0.09

*Significant at the .05 level

**Significant at the .01 level

EXHIBIT DADDITIONAL DESCRIPTION OF VARIETYD-1 Seed

Goalie perennial ryegrass seeds are similar to Delray's seeds in length and longer than seeds of Pennfine, Yorktown and Derby.

<u>Variety</u>	<u>Seed Length mm.</u>	<u>Seed Width mm.</u>	<u>Length/ Width Ratio</u>	<u>Wt./1,000 Seeds Grams</u>
Goalie	5.51	1.16	4.75	1.7875
Delray	5.54	1.24	4.47	1.6593
Pennfine	5.44	1.21	4.50	1.6969
Manhattan	5.32	1.11	4.79	1.1925
Yorktown	5.24	1.09	4.89	1.6400
Derby	5.17	1.15	4.50	1.8453

D-2 Plant

Goalie's average plant height is about the same as Yorktown plants, shorter than Pennfine plants, and taller than Derby plants. Its culm length is slightly shorter than those of Pennfine and longer than those of Yorktown and Derby. Spike length equals Yorktown and are longer than Derby and shorter than Pennfine spikes.

	<u>Naturally Occurring Height - cm.</u>	<u>Culm Length cm.</u>	<u>Flag Leaf Length - cm.</u>	<u>Flag Leaf Width - cm.</u>	<u>Spike Length cm.</u>	<u>Florets per Spikelet</u>	<u>Glume Length mm.</u>	<u>Anther Color % Plants With Some Red On Anthers</u>	<u>Spike Anthocyanins % Plants With Some Red In Spike</u>	<u>Leaf Sheath Anthocyanins % Plants With Some Red</u>
Goalie	43.0	51.2	9.4	2.9	12.5	7.7	11.4	22.7	31.2	33.9
Delray	43.7	49.2	7.9	2.9	14.5	7.2	7.9	41.0	16.4	36.1
Pennfine	50.0	52.2	8.7	3.9	13.0	7.6	9.3	37.3	20.3	24.4
Manhattan	48.0	61.9	14.9	3.8	23.8	9.5	11.1	15.5	26.7	15.4
Yorktown	42.8	46.7	8.0	3.0	15.4	7.7	9.1	26.4	40.2	50.8
Derby	41.3	42.4	7.8	2.9	14.0	7.2	9.4	38.5	37.4	69.7

D-3 Tiller Density - July 31, 1979

Under turf conditions, Goalie is less dense than Delray and Manhattan, and is more similar to Pennfine in this characteristic.

	<u>Number Of Tillers/100 Cm. Sq.</u>	
	<u>Mown at 3/4"</u>	<u>Mown at 2"</u>
Goealie	505	253
Delray	565	346
Manhattan	576	346
Pennfine	504	285

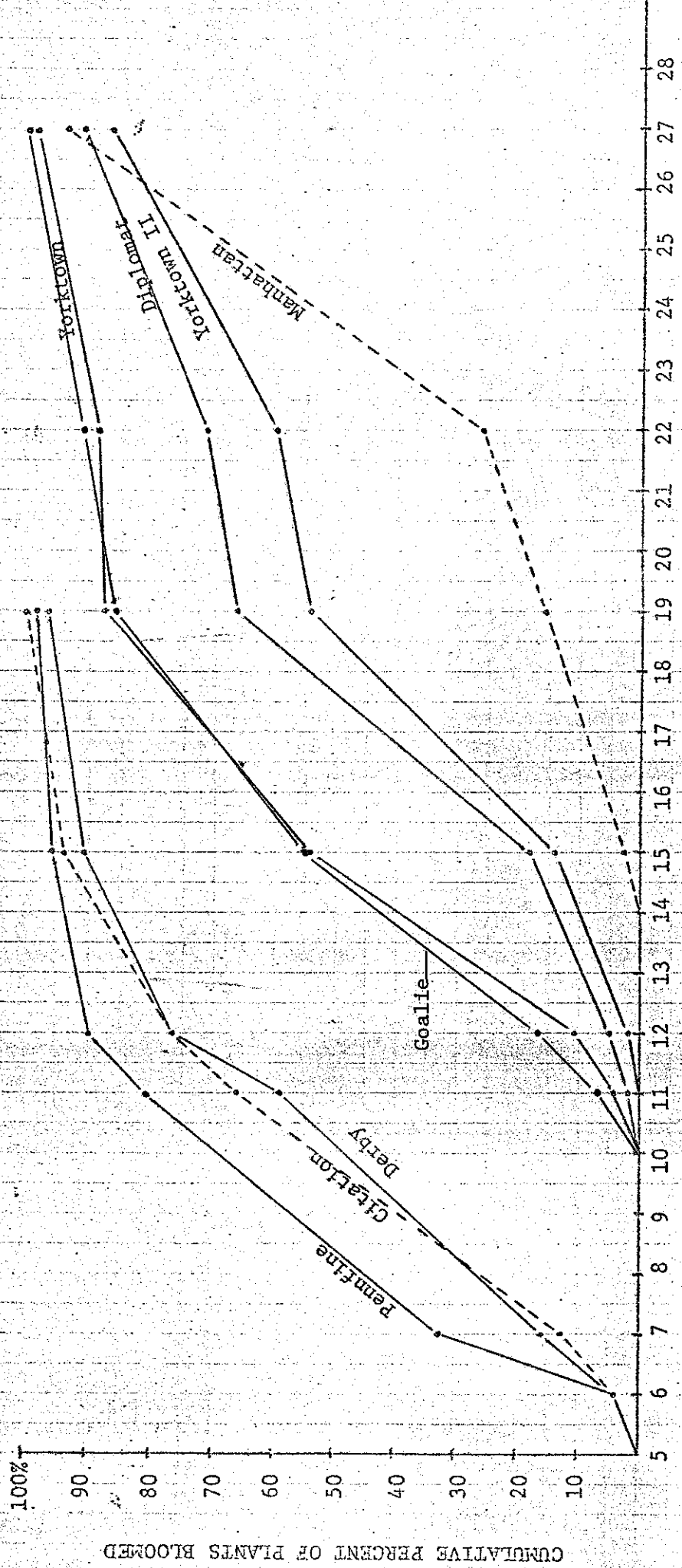
D-4 Flowering*

Goealie is medium in flowering date. It reaches anthesis at about the same time as Yorktown and is about six days later than Pennfine.

	<u>50% Bloom Date</u> <u>June, 1979</u>
Goealie	15
Yorktown	15
Derby	10
Pennfine	8
Delray	9
Manhattan	24

*See attached graph.

POLLEN SHED PERIODS OF PERENNIAL RYEGRASS CULTIVARS



DAYS FROM JUNE 1, 1979

CUMULATIVE PERCENT OF PLANTS BLOOMED

8200044

AGREEMENT

STATE OF MINNESOTA)
) ss.:
COUNTY OF HENNEPIN)

WHEREAS, NORTHRUP KING CO., a corporation duly organized and validly existing under the laws of the State of Delaware, whose address is 7500 Olson Memorial Highway, Golden Valley, Minnesota 55427, hereinafter called NORTHRUP, has rights to certain proprietary grass turf seed varieties set forth in Exhibit A attached hereto (the "Turf Seed Varieties") and made an integral part hereof; and

WHEREAS, NK LAWN & GARDEN CO., a corporation duly organized and validly existing under the laws of the State of Delaware, whose address is 7500 Olson Memorial Highway, Golden Valley, Minnesota 55427, hereinafter called NK LAWN, is desirous of acquiring all of Northrup's rights to said Turf Seed Varieties;

I. ASSIGNMENT

NOW, THEREFORE, be it known that for and in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, said NORTHRUP does hereby assign, transfer and convey to said NK LAWN all rights, title and interest in and to the said Turf Seed Varieties set forth in Exhibit A attached hereto, including (without limiting the generality of the foregoing) the right to apply for, obtain, and own, as successor in interest to NORTHRUP,

8200044

a Certificate of Plant Variety Protection for each Turf Seed Variety set forth in Exhibit B.

II. SUCCESSORS AND ASSIGNS

The obligations of NORTHRUP under this Agreement shall be binding on its successors and assigns and shall inure to the benefit of any successors and assigns of NK LAWN.

III. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

Dated: January 29, 1993

NORTHRUP KING CO.



Name: Konrad P. Wirz
Title: Vice President

NK LAWN & GARDEN CO.

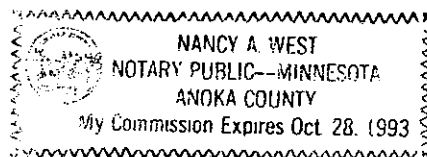


Name: Leroy J. Johnson
Title: General Manager & CEO

STATE OF MINNESOTA)
) SS.:
COUNTY OF HENNEPIN)

On this 29th day of January 1993, before me personally came Konrad P. Wirz, to me known, who being by me duly sworn, does depose and say that he resides at Minneapolis,
Minnesota; that he is Vice President of NORTHRUP KING CO. (a Delaware corporation), the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to said document is such corporate seal; that it was affixed by order of the Board of Directors of said corporation; and that he signed his name by like order.

Nancy A. West
Notary Public



STATE OF MINNESOTA)
)
COUNTY OF HENNEPIN) ss.:

On this 29th day of January 1993, before me personally came LeRoy J. Johnson, to me known, who being by me duly sworn, does depose and say that he resides at Minneapolis,
Minnesota; that he is General Manager of NK Lawn &
& CEO Garden Co. (a Delaware corporation), the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to said document is such corporate seal; that it was affixed by order of the Board of Directors of said corporation; and that he signed his name by like order.

Nancy A. West
Notary Public

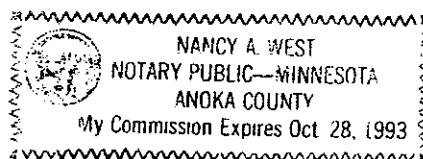


EXHIBIT A

TURF SEED VARIETIES

<u>Turf Seed Variety</u>	<u>Northrup's Ownership Interest</u>
1. Kentucky Bluegrass Aspen	PVP Certificate (Certificate #8600151 issued April 30, 1987) owned by Northrup.
2. Kentucky Bluegrass Trenton	PVP Certificate (Certificate #8600156 issued April 30, 1987) owned by Northrup.
3. Puccinellia distans Weeping Akalaigrass Fults	PVP Certificate (Certificate #8300071 issued December 30, 1983) owned by Northrup.
4. Perennial Ryegrass Delray	PVP Certificate (Certificate #8200043 issued April 26, 1985) owned by Northrup.
5. Perennial Ryegrass Goalie	PVP Certificate (Certificate #8200044 issued January 31, 1986) owned by Northrup.
6. Perennial Ryegrass Dandy	Licensed to Northrup from R.H. Bailey Seed, Inc. on September 7, 1989.
7. Perennial Ryegrass Target	Licensed to Northrup from Triad Seed Co. on August 11, 1989.
8. Kentucky Bluegrass Kelly	Licensed to Northrup from O.M. Scott & Sons Company on August 2, 1988.
9. Tall Fescue Amigo (5 ⁵ SFH)	Licensed to Northrup from Pure-Seed Testing, Inc. on February 18, 1989. 28
10. Tall Fescue Arriba (5DM)	Licensed to Northrup from Pure-Seed Testing, Inc. on September 25, 1989.
11. Tall Fescue Arid	Licensed to Northrup from Jacklin Seed Company on October 25, 1988.
12. Perennial Ryegrass Pennfine	Licensed to Northrup from Seed Production and Introduction Corporation.

8200044

EXHIBIT B

PLANT VARIETY PROTECTION CERTIFICATES

Turf Seed Variety	Plant Variety Protection Certificate No.	Issue Date
Kentucky Bluegrass Aspen	8600151	April 30, 1987
Kentucky Bluegrass Trenton	8600156	April 30, 1987
Puccinellia Distans Weeping Alkaligrass Fults	8300071	December 30, 1983
Perennial Ryegrass Delray	8200043	April 26, 1985
Perennial Ryegrass Goalie	8200044	January 31, 1986